

AUDIO PRODUCTION I

COURSE DESCRIPTION

Audio Production I is designed to give students the basic knowledge and technical skills needed to prepare them for post-secondary study or entry level employment in the audio industry. The students will develop the technical skills necessary to operate the equipment to produce a finished audio product in both studio situations and live performance. Students will develop knowledge of the business of music which will include publishing and promotional issues. They will also study the language of music. In all situations, students will present themselves with integrity and professional behavior.

It is strongly recommended that administration and guidance follow the scope and sequence and course recommendations as listed.

Recommended: Key Boarding Skills

Recommended Credits: 1

Grade Levels: 9-10

Number of Competencies: 60

AUDIO PRODUCTION I

STANDARDS

- 1.0** Students will demonstrate Audio Technology safety practices, including Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) requirements for an audio recording facility.
- 2.0** Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.
- 3.0** Students will integrate reading, writing, math and science skills and understand the impact of academic achievement in the workplace.
- 4.0** Students will demonstrate a basic understanding of the physics of sound and hearing.
- 5.0** Students will show knowledge of basic audio terms and concepts.
- 6.0** Students will analyze recorded and live audio for production and technical quality.
- 7.0** Students will demonstrate the ability to use industry equipment to record audio.
- 8.0** Students will show ability to edit and mix recorded material.
- 9.0** Student will examine successful audio production in terms of good planning.
- 10.0** Students will identify and examine careers in the music business.
- 11.0** Students will demonstrate knowledge of the history of the audio industry.

AUDIO PRODUCTION I

STANDARD 1.0

Students will perform safety examinations and maintain safety records.

LEARNING EXPECTATIONS

The student will:

- 1.1** Demonstrate a positive attitude regarding safety practices and issues.
- 1.2** Use and inspect personal protective equipment.
- 1.3** Inspect, maintain, and employ safe operating procedures with tools and equipment, such as hand and power tools, ladders, scaffolding, and lifting equipment.
- 1.4** Demonstrate continuous awareness of potential hazards to self and others and respond appropriately.
- 1.5** Assume responsibilities under HazCom (Hazard Communication) regulations.
- 1.6** Adhere to responsibilities, regulations, and Occupational Safety & Health Administration (OSHA) policies to protect coworkers and bystanders from hazards.
- 1.7** Adhere to responsibilities, regulations, and Occupational Safety & Health Administration (OSHA) policies regarding reporting of accidents and observed hazards, and regarding emergency response procedures.
- 1.8** Demonstrate appropriate related safety procedures.
- 1.9** Pass with 100 % accuracy a written examination relating to safety issues
- 1.10** Pass with 100% accuracy a performance examination relating to safety.
- 1.11** Maintain a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student:

- 1.1A** Is attentive during safety discussions.
- 1.1B** Actively seeks information about safe procedures.
- 1.1C** Responds positively to instruction, advice, and correction regarding safety issues.
- 1.1D** Does not deliberately create or increase hazards, such as by horseplay, practical jokes, or creating distractions.
- 1.1E** Reports to school or work physically ready to perform to professional standards, such as rested, or not impaired by medications, drugs, alcohol, etc.
- 1.2** Selects, inspects, and uses the correct personal protective equipment for the assigned task.
- 1.3A** Inspects power tools for intact guards, shields, insulation, and other protective devices.
- 1.3B** Inspects extension cords for the presence of a functional ground connection, prior to use.
- 1.3C** Operates and maintains tools in accordance with manufacturer's instructions and as required by regulation or company policy.
- 1.3D** Properly places and secures ladders and scaffolding prior to use.
- 1.4A** Is observant of personnel and activities in the vicinity of the work area.
- 1.4B** Warns nearby personnel, prior to starting potentially hazardous actions.
- 1.5A** When asked to use a new hazardous material, retrieves MSDSs (material safety data

- sheets), and identifies the health hazards associated with the new material.
- 1.5B** Reports hazards found on the job site to the supervisor.
 - 1.6A** Erects shields, barriers, and signage to protect coworkers and bystanders prior to starting potentially hazardous tasks.
 - 1.6B** Provides and activates adequate ventilation equipment as required by the task.
 - 1.7A** Reports all injuries to self to the immediate supervisor.
 - 1.7B** Reports observed unguarded hazards to their immediate supervisor.
 - 1.8A** Complies with personal assignments regarding emergency assignments.
 - 1.9A** Passes with 100% accuracy a written examination relating specifically to content area.
 - 1.10A** Passes with 100% accuracy a performance examination relating specifically to welding tools, equipment and supplies.
 - 1.11A** Maintains a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor.

SAMPLE PERFORMANCE TASKS

These are sample projects of the type and scale recommended to address one or more of the learning expectations for this standard. Other projects can be used at the instructor's discretion.

- Conduct a practice drill simulating a hazardous solvent spill in which an emergency action plan is to be implemented.
- Instruct a visitor to obviously approach the vicinity of a student conducting a hazardous activity and note the level of awareness demonstrated by the student.
- For a project requiring the use of ladders and/or scaffolding, note the proper placement and securing procedures followed by students.

INTEGRATION LINKAGES

Language Arts, Mathematics, Technical Algebra, Technical Geometry, Algebra, Geometry
English IV: Communication for Life, SkillsUSA Technical Championships, American
Welding Society (AWS), Guide for Training and Qualification of Entry Level Welder, National
Center for Construction Education Research (NCCER), Secretary's Commission on Achieving
Necessary Skills (SCANS), Professional Development Program, SkillsUSA

AUDIO PRODUCTION I

STANDARD 2.0

Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.

LEARNING EXPECTATIONS

The student will:

- 2.1** Cultivate positive leadership skills.
- 2.2** Participate in the student organization directly related to their program of study as an integral part of classroom instruction.
- 2.3** Assess situations, apply problem-solving techniques and decision-making skills within the school, community, and workplace.
- 2.4** Participate as a team member in a learning environment.
- 2.5** Respect the opinions, customs, and individual differences of others.
- 2.6** Build personal career development by identifying career interests, strengths, and opportunities.

PERFORMANCE STANDARDS: EVIDENCE STANDARD IS MET

The student:

- 2.1A** Demonstrates character and leadership using creative-and critical-thinking skills.
- 2.1B** Uses creative thought process by “thinking outside the box.”
- 2.2A** Relates the creed, purposes, motto, and emblem of their student organization, directly related to personal and professional development.
- 2.2B** Plans and conducts meetings and other business according to accepted rules of parliamentary procedure.
- 2.3A** Makes decisions and assumes responsibilities.
- 2.3B** Analyzes a situation and uses the Professional Development Program or career technical student organization materials directly related to the student’s program of study to resolve it.
- 2.3C** Understands the importance of learning new information for both current and future problem solving and decision making.
- 2.4A** Organizes committees and participates in functions.
- 2.4B** Cooperates with peers to select and organize a community service project.
- 2.5A** Researches different customs and individual differences of others.
- 2.5B** Interacts respectfully with individuals of different cultures, gender, and backgrounds.
- 2.5C** Resolves conflicts and differences to maintain a smooth workflow and classroom environment.
- 2.6A** Creates personal career development by identifying career interests, strengths, and opportunities.
- 2.6B** Identifies opportunities for career development and certification requirements.
- 2.6C** Plans personal educational paths based on available courses and current career goals.
- 2.6D** Creates a resumé that reflects student’s skills, abilities, and interests.

SAMPLE PERFORMANCE TASKS

- Create a leadership inventory and use it to conduct a personal assessment.
- Participate in various career technical student organizations' programs and/or competitive events.
- Implement an annual program of work.
- Prepare a meeting agenda for a specific career technical student organization monthly meeting.
- Attend a professional organization meeting.
- Develop a program of study within their career opportunities.
- Participate in the American Spirit Award competition with SkillsUSA.
- Complete *Professional Development Program Level I and Level II*, SkillsUSA.

INTEGRATION LINKAGES

SkillsUSA, *Professional Development Program*; SkillsUSA; Communications and Writing Skills; Teambuilding Skills; Research; Language Arts; Sociology; Psychology; Math; Technical Math; English IV: Communication for Life; Social Studies; Problem Solving; Interpersonal Skills; Employability Skills; Critical-Thinking Skills; Secretary's Commission on Achieving Necessary Skills (SCANS); Chamber of Commerce; Colleges; Universities; Technology Centers; Secretary's Commission on Achieving Necessary Skills (SCANS)

AUDIO PRODUCTION I

STANDARD 3.0

Students will integrate reading, writing, math, and science skills and understand the impact of academic achievement in the work place.

LEARNING EXPECTATIONS

The student will:

- 3.1** Assume responsibility for accomplishing classroom assignments and workplace goals within accepted time frames.
- 3.2** Develop advanced study skills.
- 3.3** Demonstrate and use written and verbal communication skills.
- 3.4** Read and understand technical documents such as regulations, manuals, reports, forms, graphs, charts, and tables.
- 3.5** Apply the foundations of mathematical principles such as algebra, geometry, and advanced math to solve problems.
- 3.6** Apply basic scientific principles and methods to solve problems and complete tasks.
- 3.7** Understand computer operations and related applications to input, store, retrieve, and output information as it relates to the course.
- 3.8** Research, recognize, and understand the interactions of the environment and *green* issues as they relate to the course work and to a global economy.

PERFORMANCE STANDARDS: EVIDENCE STANDARD IS MET

The student:

- 3.1A** Uses appropriate time management to achieve goals.
- 3.1B** Arrives at school on time each day.
- 3.1C** Completes assignments and meets deadlines.
- 3.2A** Assesses current personal study skills.
- 3.2B** Demonstrates advanced note-taking ability.
- 3.2C** Formulates appropriate study strategies for given tasks.
- 3.3A** Communicates ideas, information, and messages in a logical manner.
- 3.3B** Fills out forms, reports, logs, and documents to comply with class and project requirements.
- 3.4A** Reads and understands technical documents and uses industry jargon, acronyms, and terminology appropriately.
- 3.4B** Recognizes the meaning of specialized words or phrases unique to the career and industry.
- 3.5A** Utilizes computation in adding, subtracting, multiplying, and dividing of whole numbers, fractions, decimals, and percents.
- 3.5B** Chooses the right mathematical method or formula to solve a problem.
- 3.5C** Performs math operations accurately to complete classroom and lab tasks.
- 3.6A** Understands scientific principles critical to the course.
- 3.6B** Applies scientific principles and technology to solve problems and complete tasks.
- 3.6C** Has knowledge of the scientific method (e.g., identifies the problem, collects information, forms opinions, and draws conclusions).
- 3.7A** Uses basic computer hardware (e.g., PCs, printers) and software to perform tasks

- as required for the course work.
- 3.7B** Understands capabilities of computers and common computer terminology (e.g., program, operating system).
 - 3.7C** Applies the appropriate technical solution to complete tasks.
 - 3.7D** Inputs data and information accurately for the course requirements.
 - 3.8A** Researches and recognizes *green* trends in career area and industry.
 - 3.8B** Examines current environmentally friendly trends.
 - 3.8C** Applies sustainability practices by understanding processes that are non-polluting, conserving of energy and natural resources, and economically efficient.

SAMPLE PERFORMANCE TASKS

- Examine and compile different learning styles for portfolios.
- Create calendars containing all activities and obligations for one month. Discusses how to handle conflicting or competing obligations then complete daily and weekly plans showing tasks, priorities, and scheduling.
- Complete self-assessments of study habits.
- Compute precise and exact measurements.
- Explore study strategies for different subjects and tasks then analyze two homework assignments and select the best strategies for completing them.
- Create “life maps” showing necessary steps or “landmarks” along the path to personal, financial, educational, and career goals.
- Take notes during counselor classroom visits and work in small groups to create flow charts of the path options.
- List attitudes that lead to success then rate individually in these areas. Work together to suggest strategies for overcoming the weaknesses identified own and partners’ self-assessments then share with the class the strategies developed.
- Research the Internet and other technology to collect and analyze data concerning climate change.
- Keep a data file of alternative energy sources and the sources’ impact on the environment.
- Develop a recycling project at home or for the school environment.

INTEGRATION LINKAGES

SkillsUSA, *Professional Development Program*; SkillsUSA; Communications and Writing Skills; Teambuilding Skills; Research; Language Arts; Sociology; Psychology; Math; Technical Math; English IV: Communication for Life; Social Studies; Problem Solving; Interpersonal Skills; Employability Skills; Critical-Thinking Skills; Secretary’s Commission on Achieving Necessary Skills (SCANS); Chamber of Commerce; Colleges; Universities; Technology Centers; Secretary’s Commission on Achieving Necessary Skills (SCANS)

AUDIO PRODUCTION I

STANDARD 4.0

Students will demonstrate a basic understanding of the physics of sound and hearing.

LEARNING EXPECTATIONS

The student will:

- 4.1** Analyze and interpret waves and waveform characteristics including frequency, amplitude, phase, harmonics, and envelope (ADSR).
- 4.2** Examine the concepts of acoustics: reflection, absorption and diffraction.
- 4.3** Demonstrate how the human ear works, describe its capabilities and limitations, and examine how to protect one's hearing.
- 4.4** Analyze the perception of space and direction in the stereo listening environment.
- 4.5** Analyze interaction effects that result in acoustic phenomena such as phasing, combination tones, masking and beats.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student must:

- 4.1A** Use the characteristics of waves to show how to control different aspects of sound.
- 4.1B** Describe how wave concepts apply to other physical media, such as radio, electromagnetic, and microwaves.
- 4.2A** Describe the concepts of reflection, absorption, and diffraction and explain their importance in acoustic design.
- 4.3A** Describe all parts of the human ear and the function of each part.
- 4.3B** Describe the effect on hearing of long term exposure to excessive volume.
- 4.4A** Explain how direct sound and early reflections determine the physical nature of the acoustic space.
- 4.4B** Explain reverb and describe how changes in specific reverb parameters will affect reverb characteristics.
- 4.5A** Explain phasing, how it is produced, and how to avoid it.
- 4.5B** Describe and explain masking and how to correct it.
- 4.5C** Describe and explain combination tones.
- 4.5D** Describe and explain beats and explain how they can be useful.

SAMPLE PERFORMANCE TASK

- Draw examples of sound frequencies and explain amplitude.
- Illustrate the process of human hearing.
- Use microphones and various plug-ins to create reverberation in a studio setting.

INTEGRATION LINKAGES

Mathematics, , Physics, Science, Technology Literacy, English IV: Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Technical Math, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational

Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA),
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AUDIO PRODUCTION I

STANDARD 5.0

Students will show knowledge of basic audio terms and concepts.

LEARNING EXPECTATIONS

The student will:

- 5.1** Identify basic acoustic and sound-based terminology.
- 5.2** Demonstrate a basic understanding of signal flow.
- 5.3** Analyze the fundamentals of digital audio technology.
- 5.4** Identify different types of sound processing: temporal, spectral, and dynamic.
- 5.5** Demonstrate basic knowledge of studio design and acoustic treatment.
- 5.6** Analyze speaker design and placement for studio and live applications.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student must:

- 5.1A** Correctly use industry terminology in context.
- 5.2A** Create a chart to show signal flow through a console.
- 5.2B** Design a chart showing signal flow for vocal and instrument recording.
- 5.2C** Describe the signal level at different points in the recording path.
- 5.3A** Demonstrate an understanding of analog to digital conversion (ADC).
- 5.3B** Explain digital sampling and digital word length.
- 5.3C** Examine and evaluate different digital sound formats: wav, mp3, SD2.
- 5.4A** Analyze and explain temporal sound processing: delay, reverb, phasing.
- 5.4B** Analyze and explain spectral sound processing: equalizing, filtering.
- 5.4C** Analyze and explain dynamic sound processing: compression, limiting.
- 5.5A** Discuss what considerations are critical to successful acoustic design: frequency balance, absorption, symmetry.
- 5.5B** Analyze acoustic principles used in studio design: acoustic isolation, reverberation.
- 5.6A** Understand the principles of sound reproduction.
- 5.6B** Demonstrate an understanding of monitoring, and speakers and headphones.
- 5.6C** Analyze speaker design and placement for the studio and in live performance.

SAMPLE PERFORMANCE TASK

- Create a glossary of industry terms
- Draw a signal flow chart to show routing from instrument to digital recorder.
- Explain digital audio formats and describe the typical uses of each.
- Explain how reverb, delay, equalizers, compressors affect tone, timbre and frequency.
- Identify the principles behind the “live room/dead room” studio design.

INTEGRATION LINKAGES

Mathematics, English IV: Communications for Life, Technical Math, Physics, Science, Technology Literacy, , Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA),
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AUDIO PRODUCTION I

STANDARD 6.0

Students will analyze recorded and live audio for musical and technical aspects.

LEARNING EXPECTATIONS

The student will:

- 6.1** Demonstrate the ability to identify music characteristics.
- 6.2** Demonstrate the ability to identify production values.
- 6.3** Demonstrate the ability to identify technical aspects of recording.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student must:

- 6.1A** Demonstrate a basic understanding of rhythm and organization: bars, beats, time signature.
- 6.1B** Demonstrate a basic understanding of musical harmony: chords, major, minor.
- 6.1C** Demonstrate an understanding of musical form: verse, chorus, bridge, ABA forms.
- 6.1D** Identify instruments and groupings of instruments in various styles of music.
- 6.2A** Identify different styles/genres by pointing out unique characteristics of each.
- 6.2B** Identify a musical hook and describe how it helps to create a memorable piece of music.
- 6.3A** Identify overloading or clipping in recorded material .
- 6.3B** Identify proper frequency balance: blend of highs, mids, and low frequencies.
- 6.3C** Identify characteristics that contribute to successful recordings: use of effects, sonic depth, warmth.

SAMPLE PERFORMANCE TASK

- Listen to and evaluate recorded audio.
- Listen for and list changes in tempo of various music styles.
- Describe how mood is created in various types of recordings.
- Use meters and LEDs to help identify problems in signal strength.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV: Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA), www.howstuffworks.com

AUDIO PRODUCTION I

STANDARD 7.0

Students will demonstrate the ability to use industry equipment to record audio.

LEARNING EXPECTATIONS

The student will:

- 7.1** Identify and compare different computer platforms and operating systems.
- 7.2** Demonstrate familiarity with modern multitrack recording systems, including digital audio workstations, MIDI-based sequencer/recorders, and analog tape recorders.
- 7.3** Demonstrate basic knowledge of microphones: types, pick-up patterns, frequency response and specific applications and miking techniques.
- 7.4** Demonstrate ability to route signal through a production console.
- 7.5** Demonstrate basic knowledge of the use of audio hardware and software: microphone pre-amps, compressors, and other outboard equipment and plug-ins.
- 7.6** Identify various types of connectors and adapters, and demonstrate the ability to use them in basic operations.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student must:

- 7.1A** Demonstrate ability to identify software recording programs that are optimized to run on specific computer platforms.
- 7.2A** Demonstrate ability to record on various systems: set up tracking to recording unit or computer using appropriate hardware and interfaces.
- 7.2B** Determine signal strength and set appropriate levels for incoming signals.
- 7.3A** Determine the best type of microphone for specific situations.
- 7.3B** Describe when and how to use phantom power.
- 7.3C** Use a variety of microphones for specific recording situations.
- 7.3D** Place microphones in various positions for specific recording situations.
- 7.4A** Route audio signal through various mixing consoles.
- 7.5A** Identify and describe the function of microphone pre-amps, compressors, plug-ins and other outboard equipment.
- 7.6A** Identify various connectors and adapters for recording and live sound applications.
- 7.6B** Connect and use various connectors appropriate for basic operations.

SAMPLE PERFORMANCE TASK

- Set up microphones for recording session.
- Demonstrate an understanding of analog multitrack machines.
- Create short production using basic audio techniques.
- Evaluate and critique edited production for meeting of goals and objectives.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV:
Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation,
Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem
Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills
(SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational
Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA),
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AUDIO PRODUCTION I

STANDARD 8.0

Students will show ability to edit and mix recorded material.

LEARNING EXPECTATIONS

The student will:

- 8.1** Demonstrate the ability to use editing tools, including “cut and paste,” to create a finished product.
- 8.2** Demonstrate the use of panning and fading to portions of recordings.
- 8.3** Demonstrate understanding of adding effects to enhance a mix.
- 8.4** Apply simple fader and mute automation to a mix.
- 8.5** Utilize backup procedures to prevent loss of material.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student must:

- 8.1A** Use editing terminology in context.
- 8.1B** Edit track by “cutting and pasting” sections of recorded material.
- 8.2A** Create a music track featuring panning and fading for effect.
- 8.3A** Use various plug-ins to add effects to portions of recordings.
- 8.4A** Demonstrate fader and mute automation on a mix.
- 8.5A** Analyze various backup methods and procedures
- 8.5B** Demonstrate backup procedures to prevent loss of material.

SAMPLE PERFORMANCE TASK

- Produce finished product by rearranging provided audio sample.
- Use pan and delay effects for desired effects.
- Edit and mix for final product.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV: Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary’s Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA), www.howstuffworks.com

AUDIO PRODUCTION I

STANDARD 9.0

Students will demonstrate an understanding of a successful recording project in terms of pre-production, production and post-production.

LEARNING EXPECTATIONS

The student will:

- 9.1** Analyze the components of successful pre-production, including creating a budget, demoing the material, and personnel and facility choices.
- 9.2** Analyze the components of successful studio production, including the concept of track/overdub/mix, tuning string instruments and drums, proper studio etiquette.
- 9.3** Analyze the components of successful post-production, including mastering, product design and manufacture, and promotion.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student must:

- 9.1A** Demonstrate knowledge of how budgeting is used in production planning.
- 9.1B** Create a demo for master recordings sessions.
- 9.1C** Create a list of personnel for a master recording session: producer, engineer, musicians.
- 9.2A** Describe the roles and responsibilities of each person present in a recording session.
- 9.2B** Describe the process of typical pop multitrack recording.
- 9.2C** Contrast the process of typical live recording.
- 9.3A** Describe mastering and what takes place during a mastering session.
- 9.3B** Demonstrate awareness of various methods of packaging product.
- 9.3C** Demonstrate awareness of how marketing is used to bolster sales of artist recordings.
- 9.3D** Demonstrate awareness of how to distribute product via physical and virtual means.

SAMPLE PERFORMANCE TASK

- Create a budget for three hour recording session, including facility, musician and other personnel wages, hard costs, and contingency fund.
- Examine and explain how a demo can save valuable studio time.
- Create a track sheet.
- Execute a professional session.
- Edit and mix for final product.
- Evaluate and critique each stage of the recording process for meeting of goals and objectives.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV: Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation, Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills (SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational

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AUDIO PRODUCTION I

STANDARD 10.0

Students will show understanding of the music business.

LEARNING EXPECTATIONS

The student will:

- 10.1** Identify career opportunities in the music and audio industry.
- 10.2** Compare job profiles: opportunities, qualifications, and retirement possibilities.
- 10.3** Examine successful job search strategies and interviewing skills.
- 10.4** Identify additional skills that increase hiring potential.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student must:

- 10.1** List indirect career opportunities surrounding the music and audio industry.
- 10.2** Recognize the skill sets for different career opportunities within the music industry.
- 10.3** Define and demonstrate successful interview skills.
- 10.4** List skills that are considered “added value” to entry-level music industry hires.

SAMPLE PERFORMANCE TASK

- Plan for guest speakers to present alternate opportunities.
- List the skill sets required for three different careers.
- Conduct practice interviews and discuss an evaluation of the results.
- Identify and evaluate skills and qualities other than those learned in audio class that might appeal to potential employers.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV:
Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation,
Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem
Solving, Technical Writing Skills, Secretary’s Commission on Achieving Necessary Skills
(SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational
Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA),
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AUDIO PRODUCTION I

STANDARD 11.0

Students will show knowledge of the history of the audio industry.

LEARNING EXPECTATIONS

The student will:

- 11.1** Examine the history of recording technology.
- 11.2** Examine the history of sound reinforcement technology.
- 11.3** Analyze the history and development of music styles and their influence on other aspects of the arts.

PERFORMANCE INDICATORS: EVIDENCE STANDARD IS MET

The student must:

- 11.1** Describe how audio recording technology has evolved.
- 11.1** Describe how sound reinforcement technology has evolved, and discuss how the design of venues have changed along with the SR technology..
- 11.2** Identify how sound recording technology, especially the introduction of multitrack recording, has influenced history and the development of music styles.

SAMPLE PERFORMANCE TASK

- Prepare written report on development of audio equipment of choice.
- Compare acoustic design in two different concert environments.
- Write a report describing how music chronicles history.

INTEGRATION LINKAGES

Mathematics, Technical Math, Physics, Science, Technology Literacy, English IV:
Communications for Life, Problem-Solving, SkillsUSA, National Science Foundation,
Computer Skills, Internet Navigation Skills, Presentation Skills, Critical Thinking and Problem
Solving, Technical Writing Skills, Secretary's Commission on Achieving Necessary Skills
(SCANS), Occupational Safety and Health Administration (OSHA), Tennessee Occupational
Safety and Health Administration (TOSHA), Environmental Protection Agency (EPA),
www.howstuffworks.com

SAMPLING OF AVAILABLE RESOURCES

www.howstuffworks.com

Recording in the Digital World: Complete Guide to Studio Gear and Software
by Thomas E Rudolph, Vincent A Jr Leonard

Digital Home Recording: Tips, Techniques, and Tools for Home Studio Production
edited by John Chappell

Practical Recording Techniques by Bruce Bartlett, Jenny Bartlett

Arranging in the Digital World: Techniques for Arranging Popular Music Using Today's
Electronic...by Corey Allen

Promises to Keep: Technology, Law, and the Future of Entertainment by William W Fisher

Home Recording Power by Ben Milstead

On-Location Recording Techniques by Bruce Bartlett, Jenny Bartlett

This Business of Music: The Definitive Guide to the Music Industry
by M William Krasilovsky, Sidney Schemel

The Art of Digital Audio by John Watkinson

The Audiopro Home Recording Course by Bill Gibson